THE UHLE POTTERY COLLECTIONS FROM CHANCAY

BY

A. L. KROEBER

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With Appendix by Max Uhle

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SITES, GRAVES, AND STYLES

Dr. Max Uhle's collections at Chancay were made for the University of California in 1904. They comprise 701 catalogue entries, numbers 4–6361–7051 and 4–9357–9366 of the University Museum of Anthropology. Of these, 531 are pottery vessels, mostly complete. These are here described and interpreted according to the plan followed in the monographs previously issued in this series on the pottery collections from Chincha, Ica, Ancon, Moche, and Supe.[1] The data filed by Dr. Uhle with reference to his work at Chancay are contained in his field catalogue and in a general report of which the principal portions are herewith reproduced in the Appendix. He has also outlined and discussed his results in an article, "Ueber die Frühkulturen in der Umgebung von Lima."[2]

Five sites were excavated by Dr. Uhle:

Site A, La Mina, in a plain or gentle slope of soil at the northwestern foot of a rock or hill called Cerro de Trinidad. This hill is about 150 to 180 m. high and lies 400 m. south of the port of Chancay, forming part of an elevation which separates the harbor and valley of Chancay from the salty meadows known as Las Salinas.

Site B, La Calera de Lauren, 3 miles north of the town of Chancay, on the sandy southern or seaward slope of a hill 200 m. high. There are ruins of tapia and a cemetery of burials in square pits, 1.5 to 3 m. deep, like those at site A. Textiles and perishable objects were not preserved.

Site C, La Calera de Jegoan or Jecuan, on the landward side of the same hill.

Site D, Huaral Viejo, Hacienda Guando.

Site E, on the southern slope of the Cerro de Trinidad.

Sites A and E are thus on opposite sides of a hill south of the harbor, B and C on opposite sides of a hill north of the harbor. As will be seen however, the ware from A and B (as well as D, which is not located with reference to the others) is identical, rather different from the ware of C, and quite different from that of E.

The material at Site A was found in graves 1 to 5; that at B in graves 1 to 2, that at C in graves 0, 1–24, 26–30, 32–39. The vessels from D are from one grave. At site E numerous graves were excavated, but their contents were not designated separately. On the other hand Dr. Uhle separated the E ware into two groups of obviously

[1] This volume, papers by Uhle, Strong, Kroeber.

[2] Internat. Cong. Americanists, XVI, Vienna, 1908, 347–370, 1910. Cited hereafter as Frühkulturen.

different style, an E1 or "first period" and an E2 or "second period" ware. As he states in his appendix and in the article cited, the E1 ware was mostly broken and was found in the same graves with the whole E2 vessels.

The provenience of objects according to site and grave is:

Site A, grave 1, nos. 6361–6409; 2, 6410–20; 3, 6421–23; 4, 6424–28; 5, 6429–33.
Site B, grave 1, 6434–49; 2, 6451–96.
Site C, grave 0, 6497–6501, 6518–20; 1, 6503–10; 2, 6511–14; 3, 6515–16, 6704; 4, 6521–22; 5, 6523; 6, 6524–25, 6684–86; 7, 6527–38; 8, 6540–43; 9, 6544; 10, 6545–49; 11, 6551–53; 12, 6554–55, 6687; 13, 6556–58; 14, 6559–67; 15, 6568–72; 16, 6573–75; 17, 6576–80; 18, 6581–85; 19, 6586–93; 20, 6594–6600; 21, 6601–03; 22, 6604–12; 23, 6613–20; 24, 6621–25; 26, 6626–29; 27, 6630–32; 28, 6633–34; 29, 6635; 30, 6636–39; "various," "surface," or "separate," 6640–67, 6703; 32, 6668–73; 33, 6674–77; 34, 6678–81; 35, 6682; 36, 6683; 37, 6688–95; 38, 6696–99; 39, 6700–02.
Site D, grave (1), 6705–26.
Site E, "period 1," 6727–6804, 6985, 7016, 7019; "period 2," 6805–6984, 6986–7000, 7017–18, 7020; without specification, or "superficial," 7001–15, 7021–51.
Black-on-white graves, 9357–66.

The styles represented at these five sites are five in number:

A, B, D yielded only *Black-on-white* pottery of the style commonly known as that of Chancay. This type of ware constitutes a considerable part of the Ancon pottery which Strong has described as Late Ancon II.

C yielded *Red-white-black* or *Three-color Geometric* ware; three and four-color base *Epigonal;* and a considerable proportion of the *Black-on-white* pottery which was found pure at A, B, and D.

The E2 style is characterized by very simple white designs overpainted on red, and may be called *White-on-red Chancay.*

The E1 style may be described as three-color *Interlocking,* with crudely executed but rather intricate designs, and a high proportion of cylindrical vessels.

BLACK-ON-WHITE STYLE: SITES A, B, D

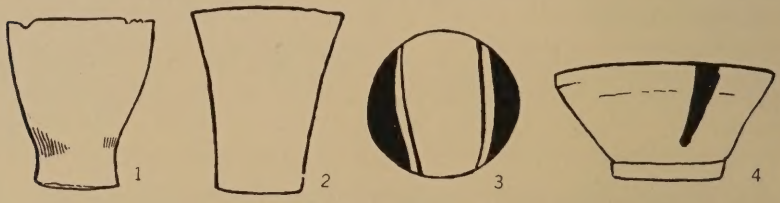
The familiar Black-on-white "Chancay type" of ware was found by Dr. Uhle at three cemeteries without admixture of any other style. Since two of these cemeteries, A and B, were on the same two hills with cemeteries E and C that yielded wares of quite different style, a difference of period is rendered almost certain.

The Black-on-white is light, thin, porous ware; its light red or orange-buff paste is rather crumbly; the white slip scales and decays

off easily. The black is often dark brown or even reddish brown. In a few large figure jars there is an overpaint of red on the lower part (pl. 80*b*). Occasionally there is as much black area as white, or even more (pl. 81*c*), but in general the black forms slender designs. Smoked blackware (pl. 80*a*) is rare.

Characteristic forms are:

1. Ovoid jars, with a pair of handles either at the neck or at the middle of the body. The mouth is either concave or convex, and often "double" or "swollen" (pls. 80*e*, 81*f*, *g*). Many of these jars are tall, rather narrow, and their bottoms almost pointed (pl. 80*b–e*). All the larger ones are somewhat flattened. The neck is sometimes modeled into a human face, characterized, like the Chancay figurines, by a sharp, narrow nose, usually by a chin that projects



Figs. 1–4. Black-on-white style goblets and low bowls; 1, B2–6475; 2, B2–6485*a*; 3, B2–6480*a*; 4, B2–6480*c*.

almost shelf-like, and by face painting that gives the effect of spectacles (pls. 80*b*, 81*e*, 82*a*). There is usually a knob, animal, or little platform modeled on the front below the neck (pls. 80*c*, *d*, 81*g*; cf. also 80*b*, 81*a* and the painting on 80*e*) or in smaller jars connected with one of the handles (pl. 80*b*, *f*). The painting extends over the upper two-thirds of the body of the jar.

2. Low open bowls, with or without a foot, more often with it. (pl. 82*f*, *g*; figs. 3, 4).

3. Incurved bowls (pl. 82*c*, *e*).

4. "Quero"-shaped unstemmed goblets or flat-bottomed unhandled cups. The profile is concavely conical (figs. 1, 2); some, with a foot, are almost hourglass shaped. These goblets are usually plain white.

These four types account for 107 of the 122 pieces from sites A, B, D. A few other forms appear in plates 80*a* (black), 80*f* (mammiform), 81*d* (buff), 82*b*, 82*d*, and fig. 5 (mammiform).

The patterns and design elements include:

Simple narrow stripes (pl. 80*d*).

Paired lines or stripes (pls. 80*c*, 82*c*).

Stripes, paralleled by lines (pl. 82*b*).

Same, with rows of dots (pls. 80*c*, 81*a*). On the lip of plate 80*e* the arrangement is of alternating triangles with dots.

Stripes alternating with zigzag or wavy lines (pls 80*d*, 81*b*, *e*, *f*).

Pairs of lines diagonally crossed (pl. 81*f*, *g*).

Toothed diagonals, triangles, or diamonds, or stripes broken by white squares (pls. 80*c*, *d*, 81*a*, *g*, 82*e*).

Small, free-standing animals or birds, curvilinear but conventionalized, usually repeated (pls. 80*c*, *e*, 82*c*), sometimes reduced to vestiges (pls. 80*d*, 82*d*).

Low bowls mostly carry a pattern of two segments (pl. 82*f*, fig. 3); sometimes a pair of centripetal stripes or horn-like curves, inside or out (pl. 82*f*, fig. 4); or, the area between the two segments is patterned (pl. 82*g*).

A definite characteristic is bilateral asymmetry of design (pls. 80*d*, 81*f*, *g*), the two quadrant panels on each side of the median line containing dissimilar designs.

A few jar paintings can be described as elaborate (pls. 80*d*, 81*g*), but most patterns are simple, and all rather hastily drawn.

Dr. Uhle calls the Black-on-white ware late, and there is no reason to suppose otherwise. The site C pieces shown in plates 81*e*, *g*, 82*d–g* are Black-on-white in manner although found in graves also containing Three-color Geometric and Epigonal ware. The two styles therefore overlapped in time. The priority of Three-color and Epigonal over Black-on-white is indicated (1) by the relative antiquity of Three-color at Pachacamac[3] and Moche,[4] where it is pre-Late Chimu and pre-Inca; (2) by the relations which Epigonal bears to Tiahuanaco; (3) by the wide diffusion of Epigonal and Three-color (Pachacamac, Ancon, Supe, Moche), whereas Black-on-white is limited to the district from Huacho to Lima,[5] even Supe having revealed none, and (4) by Strong's determination of Epigonal (Tiahuanaco) as occurring in Middle Ancon I and II, Three-color Geometric being characteristic of Late Ancon I, and Black-on-white of Late Ancon II.

All this suggests Black-and-white as the latest ware of Chancay and the immediately adjacent valleys. In that case one should expect to find it more or less associated with Inca and Late Chimu. Yet Dr. Uhle discovered no piece of either style in his three Chancay cemeteries; and his Ancon excavations also yielded none, although Reiss and Stübel found some Inca ware at Ancon.[6] The relative paucity of these late wares at and near Chancay (a complete absence is hardly probable) is the more remarkable in that Late Chimu is well represented, at least in variants, at Pachacamac,[7] and its influence can be traced easily as far as Chincha[8] and Pisco,[9] while Inca is of course pan-Peruvian. There is not a single stirrup-mouth in the Black-on-white Chancay collection, nor any of the modeling or relief ornamentation

[3] Uhle, Pachacamac, pp. 35, 41, pl. 7, figs. 1–8, pl. 8, vs. pl. 13.

[4] This series, XXI, pl. 62.

[5] Am. Anthrop., n. s., in press, 1926.

[6] See the classification in Strong, this volume, pp. 187–189.

[7] Uhle, Pachacamac, pls. 13, 18.

[8] This series, XXI, p. 14, fig. 4.

[9] Specimens in the Peabody Museum of Harvard University and the Field Museum of Natural History.

characteristic of Late Chimu. The stippled piece *d* in plate 81 perhaps shows a remote influence of Late Chimu relief stippling, but the piece is Central rather than North Peruvian in manner.

It must be concluded then that the valley of Chancay, and in some measure the adjoining ones, were not seriously invaded by the late stylistic influences of the Chimus and the Incas. This fact would account for the development of a definite local style at a date when in the remainder of Peru these were being submerged, or at best were struggling against competition as at Ica. For this reason, perhaps, it came about that the late Chancay style attained to a two-color scheme. Color variety had evidently been shrinking in Peru for a considerable time until the Inca influence partly reinvigorated it; compare the superseding of red-and-white Proto-Chimu and three-color Pachacamac by prevailingly black Late Chimu, and the reduction at Ica: Proto-Nazca 4–6 colors, Middle Ica 3–4, Late Ica 3 only, Inca 3–4. This general Peruvian tendency toward shrinkage of color scheme seems to have been carried to its undisturbed conclusion in the coast nook of Chancay where for some reason it was not subjected to the color obliterating influences of Late Chimu or the color restoring ones of Inca.

There are a few traits of Black-on-white which may be the result of indirect Inca influence or of influences affecting both. Such are: the frequent placing of handles low on the body of jars, the relatively sharp bottom, the knob or animal below the neck, the paneling of the design in quadrants. All these, however, are only remote suggestions of the aryballos: hints, if anything, that were remodeled to fit into a quite distinct and self-possessed style. Besides, the origin of the Cuzco style is not known. Dr. Uhle looks upon Chincha as having helped to form the Cuzco style. We need not go so far as to commit ourselves to this view, in the present state of imperfect knowledge, and yet must admit the definite possibility that the traits which Chincha, Cuzco, and Black-on-white Chancay share are derived from a common though as yet undertermined source or set of influences, rather than that these styles are all of specific Cuzco origin.

THREE-COLOR AND EPIGONAL STYLES: SITE C

The ware from site C, La Calera de Jecoan, is of several distinguishable styles. It is well to state explicitly at the outset that these several styles occur again and again in association in the same grave.[10] Many graves contain a preponderance of material in one style, and some contain one style exclusively. But these seem little more than normal variations of distribution, expectable from chance, especially with the number of vessels averaging less than 5 per grave.[11]

The *Epigonal* style was so named by Uhle on the ground of decadent derivation from the style of Tiahuanaco. It is well represented at Pachacamac, Ancon, Supe,[12] and, in somewhat variant forms, as far north and south as Moche and Ica.[13] It seems however not to have been reported from the vicinity of Tiahuanaco itself; and Dr. J. C. Tello regards it as at least partly derivative from the old north Andean style of Chavin and Recuay and therefore only indirectly related to that of Tiahuanaco and perhaps its contemporary rather than successor.[14] Strong and Kroeber have also pointed out certain difficulties which the Uhle collections from Ica present toward the interpretation of Epigonal as derived from Tiahuanaco and have suggested the possibility of the reverse development.[15] It must further be remembered that at Pachacamac, where Dr. Uhle first found and defined the Epigonal type, it occurs, according to his words, in the same graves with the rarer Tiahuanaco style.[16]

Whatever the origin and relations of the Epigonal style, its type is however clear, especially for the central Peruvian coast area. It is executed in 3 or 4

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[10] The following are the proportions in the graves with larger series of specimens: grave 0: black on white vessels 6, three color vessels 2; 1: 2, 4; 2: 3, 0; 6: 5, 0; 7: 3, 4; 8: 0, 4; 13: 1, 2; 14: 5, 2; 15: 3, 2; 17: 0, 4; 18: 2, 2; 19: 7, 1; 20: 4, 2; 22: 0, 7; 23: 1, 4; 24: 0, 3; 26: 1, 3; 31: 2, 1; 37: 4, 1. "Black on white" here includes all-white and red on white; "three color" includes four colors. The two groups correspond closely with the Black-on-white style on the one hand and the Epigonal and Three-color Geometric styles on the other.

[11] One hundred eighty-one vessels in 38 graves.

[12] Pachacamac: Uhle, pl. 5; Ancon: Strong, this volume, pl. 44; Supe: Kroeber, *ibid.*, pl. 73.

[13] Moche: Uhle, JSAP, figs. 16, 19, pl. 6, figs. 1–8, and Kroeber, this volume, pls. 63, 64, 66; Ica: Strong and Kroeber, *ibid.*, pl. 30.

[14] Dr. Uhle himself, in a recent letter, expresses the belief that part of the wares called Epigonal are not dependent on Tiahuanaco and perhaps anterior to it.

[15] This volume, 118, 120.

[16] Pachacamac, p. 22.

colors—in the latter case a deeper red being usually added to R, W, B[17]—is crudely painted in impure pigments, and without lustre. The style is most pronounced in cylindrical, flaring, and low goblets and in low bowls. Among its most pronounced features of design are small white rectangles (usually in rows) each containing a short bar; square faces, with or without feather headdresses, and with the nose joined to the upper border; panels with rays or stripes or bars; pairs of half-interlocked open spirals or curves smooth or serrated; double or triple bars or step-pyramids projecting from the rim toward the center of bowls, usually from opposite sides; large dots or small circles, especially in rows. These elements appear in plates 83*b–i* and 84*c*. Epigonaloid are also the jars in plates 84*g, h,* 85*b,* the last having been found near the surface at site E. Epigonal is perhaps the least numerously represented style at site C.

The *Three-color Geometric* style is characteristic of site C, without being numerically dominant. It has been described from Pachacamac, Ancon, and with some variation from Moche.[18] It is not represented in the Uhle collection from Supe although that valley lies but little north of Chancay. It is here named Three-color Geometric to distinguish it from the Three-color Interlocking of site E and of the valley of Lima;[19] and from the Three-color Textile, as the Late Chincha and Late Ica[20] styles may be called.

Three-color Geometric is characterized by its restriction to R, W, B, its overwhelming or exclusive use of gometric as opposd to representative ornament, a mediocre execution, and a dull finish. Characteristic of its designs are red stripes or broadish lines on a white ground, their angles filled with small black-bordered enclosures which often contain a dot or dash. The red "framework" is most typically a step, a zigzag, or a pair of zigzag lines crossing to form a row of diamonds. The little black-bordered outlines are, correspondingly, rectangles, isosceles triangles, and diamonds. Compare plates 83*a,* 84*a,* 85*d, e, h, i,* which agree closely with the Pachacamac, Ancon, and Moche pieces already referred to.

Related to the foregoing are red-white-black diagonally disposed squares, zigzag bands between stripes, zigzag bands containing S-scrolls, and smaller figures. Compare plates 83*f,* 84*d–g,* 85*c, f, l,* several of which lean toward Epigonal.

On the other hand, the jars in plate 85*a, h,* tend in the direction of Black-on-white in pattern and shape, though still three-color.

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[17] Nos. 6557, 6570, 6577, 6589, 6618, 6619, 6626, 6628 are four-color. The half dozen graves in which these four-color specimens were found, had Black-on-white vessels forming about one-third of their contents. No. 6570 is from grave 15, which held 3 B–W vessels out of 5; 6589 from 19, 7 B–W out of 8. The association of pure Black-on-white with the definite three and four-color Epigonal is thus certain.

[18] Pachacamac: Uhle, pl. 7, especially figs. 1, 4, 5; pl. 8, figs. 2, 3, 4; Ancon: Strong, this volume, pl. 43*i–k* (Late Ancon I); Moche: Kroeber, this volume pl. 62 (3 vessels from 2 graves only, but important for lying below a Late Chimu grave).

[19] Uhle: Frühkulturen, especially figs. 4 (Chancay), 5 (Pachacamac, but "Geometric" as much as "Interlocking), 10 (Chancay), 16 (Aramburú).

[20] Kroeber and Strong, this volume, pls. 11, 12, p. 17, fig. 6, 1924, and pls. 32–38, 1925 ("Late Chincha I" and "Late Ica I," also in part "Late Chincha II" and "Middle Ica II" and "Late Ica").

Black-on-white is the third style represented at site C. A number of vessels from this site have been included in the illustrations of Black-on-white ware (pls. 81*e*, *g*, 82*d*–*g*). In all of these except plate 82*f* some trace of Three-color Geometric manner is present. Black-on-white constitutes a good-sized minority of the vessels from C.

As Dr. Uhle points out, the Calera de Jecuan series is interesting precisely because it comprises three styles—elsewhere found pure but here associated—plus transitions between them. It shows how the Black-on-white grew as a local specialization out of the more widely spread Three-color Geometric, and how this, in turn, links with the Epigonal. As Epigonal has 4 colors at times and represents heads and figures, it is more different from Black-and-white and therefore presumably at the opposite end of the temporal series from it; that is, earliest of the three. This statement refers to the time of origin and culmination of each style as a style: there is no intimation intended that the particular series of vessels from site C were anything else than contemporaneous. The overlapping in period of styles is a familiar phenomenon in Peru.

That Epigonal is on the whole the earliest of the three styles here associated contemporaneously, accords well with the opinion generally held of it, whether that be Dr. Uhle's view connecting it with the Tiahuanaco style or Dr. Tello's deriving it from that of the northern highland. The site C Epigonal is a late Epigonal—faces and figures most rudimentary, execution slovenly. The Epigonal of Pachacamac and Supe, on the other hand, is less decayed; and it is also associated with ware in a style presumably originating earlier—more carefully drawn in detail, showing up to 5 and 6 colors, hard surfaced, and polished—the coast variety of Tiahuanaco.[21] We have then, for this central coast area, the time sequence Tiahuanaco—early Epigonal—late Epigonal—Three-color Geometric—Black-on-white, established both by the unmixed occurrence of some of the styles and by the association, with transitions, of each with the adjacent ones.

Of bearing on the relation between Epigonal and Three-color Geometric, is the fact that the Epigonal style is most marked, on the whole, in goblets and low bowls, the Three-color in jars. So, at Supe, the goblets, bowls, and double-spouts show most of the Tiahuanaco and

[21] Dr. Uhle calls it simply Tiahuanaco. But it is well to remember that in spite of its resemblances to the non-Inca ware from the Titicaca region, it differs from this. It has, for instance, forms apparently never reported from the Titicaca area—the double spout, bird and spout, jar with tapering face spout—besides numerous differences in designs.

Epigonal manner, the jars more modeling and simple painting. At Pachacamac, again, a comparison of Dr. Uhle's plates 3, 4 with 7, 8 reveals the Tiahuanaco-Epigonal style most markedly in forms such as goblets, the Three-color in jars. In other words, Peruvian pottery painting styles show a tendency to crystallize in connection with certain shapes on which they persist after other vessel forms have been introduced or have progressed to new shapes and ornamentation. This is a fact which must not be overlooked in the attempt to derive culture time-sequences from relations and associations of ceramic decoration.

Rather remarkable is the practically total absence at Chancay of northern influences. There are very little modeling, almost no blackware, and no Proto-Chimu or Late Chimu resemblances. The only stirrup-mouth is the hybrid form plate 85*e*, with wide flaring mouth and handles on the stirrup, painted in typical Three-color Geometric. It is a close counterpart of a Late Ancon I piece.[22]

The bulk of the site C material is vessels of the same four shapes that constitute the overwhelming majority of the Black-on-white pieces from A, B, and D—jars, goblets, low and incurved bowls. In part this resemblance is due to the C series including Black-on-white specimens. In part, however, it is the result of the genetic relation of Three-color to Black-on-white.

FORM FREQUENCIES—PERCENTAGES

	Site C	*Sites A, B, D*
Jars	51	49
Low bowls	13	27
Incurved bowls	12	8
Goblets	12	4
Other forms	12	12
Total	100	100

Goblets have become less frequent in Black-on-white, bowls more frequent, jars remain constant.

The following table shows more fully some of the variations between the lots, with the site C material subdivided according to color. It will be observed that the cylindrical goblet, high or low, has gone out, but the flaring goblet forms survive in Black-on-white; that the one-handled jar is almost extinct, but the unhandled figure jar has taken its place; and that handles are frequently set on the body in Black-on-white ware, more rarely in trichrome. The jar necks too are simpler in Three-color, as the plates show. The low bowl without the foot, and the incurved bowl with lip, seem typical of Black-on-white.

[22] Mus. no. 4–5595, this volume, pl. 43*n*, 1925.

FORM FREQUENCIES IN DETAIL

	Site C R–W–B[23]	*Site C* B–W[23]		*Sites A, B, D* B–W	
Jars—					
One handle—from neck	12	7		1	
Two handles—from neck	25	23		23	
—from belly	6	11		20	
—rudimentary or lugs	5	3		6	
Human figure, no handles	....	1	93	10	60
Low Bowls—					
With foot	11	11		27	
Without foot	1	....	23	6	33
Incurved Bowls—					
Without lip	4	13		7	
With lip	....	5	22	2	9
Goblets—					
Cylindrical	2	....		....	
Flaring	7	4		3	
Hour-glass	2	....		2	
Low cylindrical	7	....	22	2	7
	82	78	160		107
Other forms			21		15
Total			181		122

WHITE-ON-RED AND INTERLOCKING STYLES: SITE E

The site E material is perhaps the most interesting from Chancay. That from the other sites has the value of relating known styles; that from E shows two new styles—new at least at the time of their discovery. Owing to conditions encountered, Dr. Uhle did not inventory his vessels from site E by grave provenience. His most typical specimens in one of the two new styles, the actually interlocking ones, were mostly found broken and often incomplete in graves containing intact white-on-red ones. His argument, as set forth in the appendix, is that the Interlocking culture was the earlier, and that subsequent people of a lower culture, of which the White-on-red ware is representative, used the larger sherds of the earlier period as corpse covers. On this basis, he inventoried his E material as "first period" and "second period." However, he speaks of having succeeded in uncovering a few intact first period vessels, which had evidently been

[23] R–W–B in this table includes R–B, R–W, R; B–W includes W. Roughly, R–W–B here means Three-color Geometric and Epigonal; B–W, Black-on-white style; but form and pattern do not always agree with color scheme. It will be recalled that a few good Black-on-white style pieces from A, B, D show some red.

found by the second period people in digging graves and had then been reinterred with their own dead. Actually the collection contains about four dozen whole vessels designated as "first period" plus a few similar ones of "second period" which are somewhat cruder but essentially similar in type. Compare for instance plate 89*f* with 86*f*, and 90*a* with 86*g*.

Plausible as Dr. Uhle's interpretation of the situation at site E is, it is accordingly a subjective one. However, the objective facts as to association of specimens in the ground and within separate burials not having been obtainable or being no longer available, the collection will

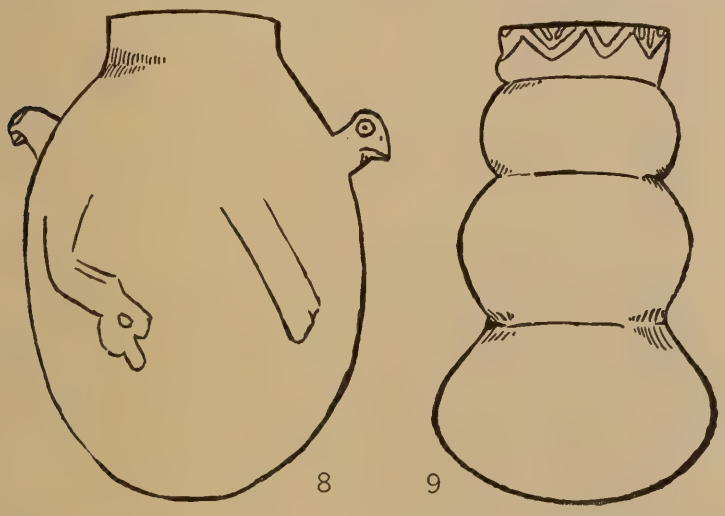
Figs. 5–7. White-on-red style jars; 5, C24–6420 (found in association with Three-color and Epigonal ware, White-on-red in appearance, actually probably a base Epigonal specimen); 6, E–6833 (black, mammiform); 7, E–6986.

be examined as divided by Dr. Uhle into lots E1 and E2. These two designations therefore do not, like A1 or C36, refer to graves; nor are they employed with unreserved acceptance of Dr. Uhle's view as to the lots being temporally distinct. They are used as enforced groupings which obviously conform in the main to a real distinction of some sort within the site E ware.

THE WHITE-ON-RED STYLE E2

The E2 ware is the more numerous. It is simple in form and simple in painting. The ware is light red, strong, fairly thick and smooth, unstudied but not unpleasing in shape. About 30 per cent of it is unpainted; the remainder mostly has simple white designs overpainted on the red, occasionally black on white, or black and white on red, or all white. There is a low proportion of black vessels—not very successfully smoked. Nearly all the pieces look utilitarian, but scarcely any show fire-blackening or other signs of use. Modeling is almost lacking, and where attempted very inept. There is no clear resemblance to Inca, Tiahuanaco, Chimu, Nazca, or any of the better known Peruvian styles.

The forms run wholly to bowls and jars, a full sixth of the collection being mammiform jars, large and small (pl. 86*e*; fig. 6). About half are ordinary jars, a third, bowls. Somewhat less than half the bowls have a lip (pls. 86, 87). The jars vary from almost cylindrical or globular forms without well defined neck (pl. 87*f*, *i*, *k*) to others with a cylindrical or even flaring mouth (pls. 86*d*, 87*g*; fig. 8). Occasionally they are constricted one or more times, so as to resemble from two to four bowls set on top of one another (pl. 87*a*; fig. 9). These, with the crude pieces of plate 86*f*, *g*, a few vessels dcorated with knobs or projections (pls. 86*e*, 87*g*; fig. 8), and the breast forms represent the only attempts at non-utilitarian modeling. Not quite half the bowls and simple jars are handled. The bowls have the handles extending more or less horizontally, the jars usually vertically from the shoulder or neck; one-handled jars also occur (pl. 87*f*; fig. 7). There are no goblets and no cook pots; and none of the bowls has a foot, in distinction from the majority of low bowls from the Three-color and Black-on-white cemeteries. The subjoined list classifies the collection.



Figs. 8, 9. Redware jars, White-on-red style; 8, E–6862; 9, E–6858.

WHITE-ON-RED STYLE FORMS

Bowls—			
Lipless, low, flaring (pl. 87*c*, *j*)	14		
Lipless, low, incurved or vertical-walled (87*d*, *e*)	16		
Lipless, low, incurved, 2 handles (86*a*)	6	36	
With lip, incurved (86*c*, 87*h*)	6		
With lip, incurved, 2 handles (87*b*)	18	24	60
Jars—			
Broad mouth, no definite neck (87*i*, *k*)	14		
Broad mouth, 2–4 bulges (87*a*; fig. 9)	4	18	
Vertical or flaring neck (86*b*, *d*)	22		
Vertical or flaring neck, 2 handles or knobs (fig. 8)	25		
Vertical neck, 1 flat or round handle on neck (87*f*; fig. 7)	11	58	
Mammiform (86*e*; fig. 6)	30	30	
Cylindrical, with or without rim of knobs (87*g*)	3		
Small mouth, large knobs or handles	3		
Double spout (86*f*)	2		
Bird (86*g*)	1	9	115
			175

As for color, the tabulation that follows shows the prevalence of white design and red ground color, but also that this scheme is not exclusive, even three-color occurring.

WHITE-ON-RED STYLE: COLOR

Actually white on red	99
All white	14
Black on white	5
Black and white on red	6
Smoked black	3
Plain redware	35
Uncertain, obscure or decayed	13
	175

Fig. 10. Cylindrical vessel, Interlocking fish pattern. R–W–B. E–6734.

Designs are notably simple: dots, small circles, bars, angles, zigzag lines, diamonds, crossed lines. These are usually aggregated in from 2 to 5 rows or parallels. The dots and circles also come in clusters, follow lines, or fill spaces between them. The execution is as crude as the scheme is artless.

A few patterns (pl. 87*b*, *i*) look as if they might be reductions from the triangular patterns common on the E1 Interlocking style vessels, but such interpretation must be advanced with reserve. Designs as simple as these White-on-red ones might be derived from almost any antecedents, and a linking would be legitimate only in the face of specific transitions.

THE INTERLOCKING STYLE E1

The lot of vessels designated as E1 by Dr. Uhle really comprises two or three groups which have little in common except the absence of the specific White-on-red characters of the E2 lot just discussed. Somewhat more than half of the series (*a*) consists of bowls and broad cylindrical jars with an interlocking fish, fret, or triangle pattern in

Fig. 11. Cylindrical vessel, Interlocking fish pattern. R–W–B. E–6739.

three colors. The smaller half of the series (*b*, *c*) varies greatly in form and color, shows as much modeling as painting, and connects with the interlocking style pieces chiefly, and somewhat dubiously, by the presence of several conventional fish designs, although these stand solitary and free.

(*a*) Most of the true interlocking ware is broken, as stated by Dr. Uhle. The number of whole pieces, or such as can mainly be reassembled, is scarcely a dozen. About twice as many more are represented by sherds, some of them large, allowing the reconstruction of the pattern. This is always in three colors,

fundamentally R, W, B; but the red is sometimes pale, sometimes brownish, always dull, and the white runs often to yellow, buff, or gray, while some of the black is grayish.[24] The pattern is therefore not salient, and in many cases is impossible to photograph. Its essential trait is an interlocking of the elements, the engaging ones of which are in contrasting colors and between them

Fig. 12. Cylindrical vessel, Interlocking style. R–W–B. E–6740.

fill the decorative field. These elements are fishes, or possibly sometimes snakes, with triangular heads, and bodies bent on themselves and sometimes serrated (pl. 88*c;* figs. 10, 11, 15, 19, 22, perhaps 18). In borders there is an interlocking fret which seems to be a reduction of the same fish motive (pl. 88*c, d*,[25] perhaps 89*i;* figs. 10–14, 16–17; fig. 19, similar but without inter-

[24] The firing of the pottery was not infrequently uneven and unskilful, and several specimens have bulged or flattened during the process, as also in the E2 ware and that from site C.

[25] Uhle, Frühkulturen, fig. 10.

lock; fig. 20, with step). Perhaps related are triangles that suggest much reduced faces. These interlock, but do not contrast in color (pl. 89*a*, *g*; fig. 13). Other elements which are more or less worked into the interlocking scheme are zigzag lines (pls. 88*d*, 89*i*; figs. 12, 14) and rows of dots (pl. 88*d*; figs. 12, 14, 19); as the illustrations show, these tend to associate. These designs are discussed in Dr. Uhle's report on his collection, printed below in the Appendix.

Fig. 13. Cylindrical vessel, Interlocking style. R–W–B. E–6748.

Somewhat similar ware was found by Dr. Uhle at Aramburú in the valley of Lima,[26] though there the fret and a step are more in evidence than the fish; and he adduces a fragment from Pachacamac, secured by him long after his classic excavations there.[27] As he also points out, the interlocking fish pattern is found in Proto-Nazca; and it is from Proto-Nazca influence that he derives the present style.[28]

(*b*) A few jars seem related to the foregoing group through being painted with a serrated fish, usually single. One of these is a cylindrical jar like those

[26] Frühkulturen, fig. 16.

[27] *Ibid.*, fig. 5. See also Uhle, Pachacamac, figs. 26–28.

[28] Frühkulturen, p. 356 seq. The five vessels shown in fig. 7 are obviously from Nazca, as the text suggests, not from Chancay as the legend states.

of group (*a*); the others are mammiform, flat, or double-spouted (pls. 88*b*, 88*e*; fig. 21; also pls. 88*a*, 90*d*, whose form and texture ally them with the following group).

(*c*) Finally, there is a varied assortment of pieces: double-spouts (pl. 89*f*, cf. 88*a*; fig. 26); bird or animal jars, poorly done (pl. 90*a–c*); human figure jars, rather mediocre in modeling (pl. 90*e*, *f*, *h*), and crude jars with heads (pls. 89*e*, 90*g*); blackware bowls (pl. 89*b*, *d*); a thin-spouted jar (fig. 24); a

Fig. 14. Cylindrical vessel, Interlocking style. R–W–B. E–6745.

striped pitcher and jar (pl. 89*e*, *h*); a projection or knob of a very large jar (fig. 25); and a large flattish or mammiform jar with a design of a hexagonal face (pl. 88*f*). These are the most distinctive pieces. The face on the last mentioned relates to a face among the interlocking fish on plate 88*c* (fig. 10).[29] Broad stripes appear in this group in plates 89*e*, *f*, *h*, 90*b* (cf. also fig. 24). The serrated fish of plates 88*a* and 90*d* has already been mentioned in connection with the preceding group.

[29] Another face appears on the jar pl. 84*b*, which is "superficial" from E. The "frame" of this face suggests the serrated fish design; the ends of the serrations are Three-color Geometric; and the face is like Epigonal ones (pl. 83*e*).

RELATIONS OF THE TWO STYLES AT E

The material from site E is difficult to understand. The White-on-red, E2, is a definite style. So is the true Interlocking, E1a. That most of this was found fragmentary, whereas the White-on-red collection is prevailingly whole, goes to support Dr. Uhle's explanation that people of one culture interred in the cemetery of another. However, there are whole interlocking pieces; and there may have been many broken white-on-red ones.[30]

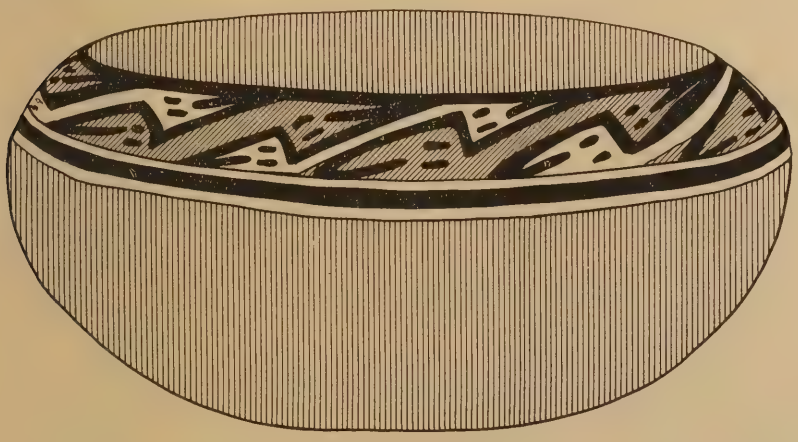


Fig. 15. Incurved bowl, Interlocking fish pattern. R–W–B on unpainted ground. E–6746.

A further complication is introduced by the heterogenous material which Dr. Uhle has allotted to his E1 period. The E1b group might be construed as still related to the interlocking E1a. The E1c lot can certainly not be so interpreted on the evidence of its own forms and designs. It is not only free from trace of interlocking patterns but quite variable inter se in every respect, even as regards texture. Moreover, if E1b and E1c are classed with E1a into a single E1 style, the number of whole vessels in this style becomes too great to accord well with Dr. Uhle's explanation that the E2 people encountered the E1 vessels in the ground and, purposely or in digging, broke them.[31]

[30] Dr. Uhle has paid more attention to sherds than most collectors in Peru; but he saved only those that seemed significant through a distinctive pattern. With nearly 200 entire vessels in hand, he would hardly have collected fragments of a ware so crude as White-on-red. Most of its fragments at that would be plain red and unmodeled: the sort of sherds that occur at all Peruvian coast sites.

[31] His published statement, Frühkulturen, p. 353, allows for more whole E1 vessels than his field report (Appendix, p. 297): "Das Merkwürdige . . . . ist, dass sich in ihren [E2] Gräbern fast immer einzelne Gefässe, oder Reste

It remains to consider the affiliations of the styles.

Dr. Uhle regards the White-on-red Chancay style as related to the primitive or shellmound cultures of Ancon and Supe,[32] but "a little different."[33] He holds that "the white painted rings and lines are a simple translation of previously engraved ornaments into painted ones, under the influence of their more advanced instructors [and predecessors, the E1 people]."[34] This opinion seems venturesome. The step from incision to paint is not necessarily taken lightly by a people; and as to the designs themselves, the incised ones from Ancon and Supe have nothing actually in common with the painted ones from

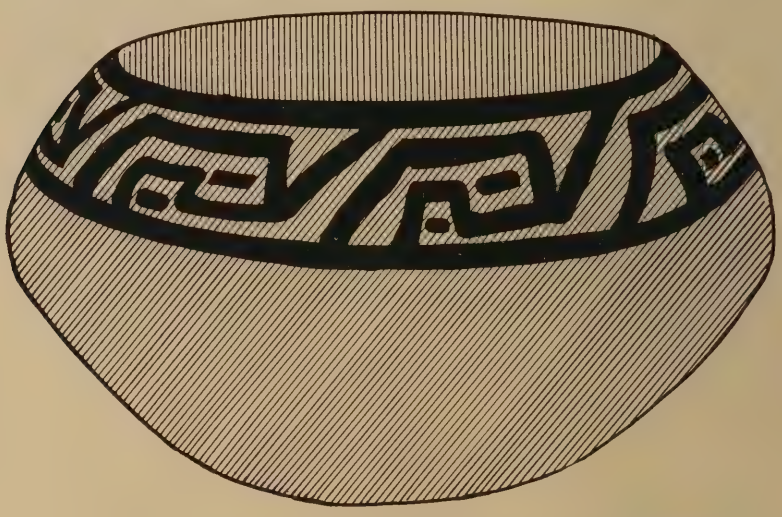


Fig. 16. Incurved bowl, Interlocking fish pattern much reduced. R–B, inside unpainted. E–6781.

Chancay except the comparative simplicity of both. Even the technology, the color and texture, of the wares are considerably different, as are the forms. Nor can I see much relation between Ancon-Supe primitive ware and Proto-Nazca, which Dr. Uhle alleges.[35] It appears rather that after his discovery of Proto-Nazca in situ, he was so impressed with the antiquity of this style, that, not encountering it on the central coast, he equated with it, or rather derived from it, the simplest and presumably earliest culture which he found at Ancon and Supe. At Chancay then, where the E1 Interlocking vessels do

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von einem hoch kultivierten Volke neben ihren eigenen ganz primitiven Töpferein fanden . . . . Einzelne hervorragend schöne [E1] Gefässe waren von ihnen [E2 people] aufgehoben, wahrscheinlich benützt und dann mit beigesetzt worden."

[32] This volume, pls. 48, 79.

[33] Frühkulturen, pp. 352, 353.

[34] *Ibid.*

[35] *Ibid.*, p. 356.

bear indubitable Proto-Nazca resemblances, he construed the association of these with the simple White-on-red as one of priority and sequence on the spot, and therefore derived the White-on-red from the incised Ancon-Supe and approximated it in time. This derivation and approximation perhaps influenced him to see a resemblance which is hard to discover.[36]

It is well to remember in regard to the primitive fishing or shell-mound culture of Ancon and Supe that the antiquity of this does not

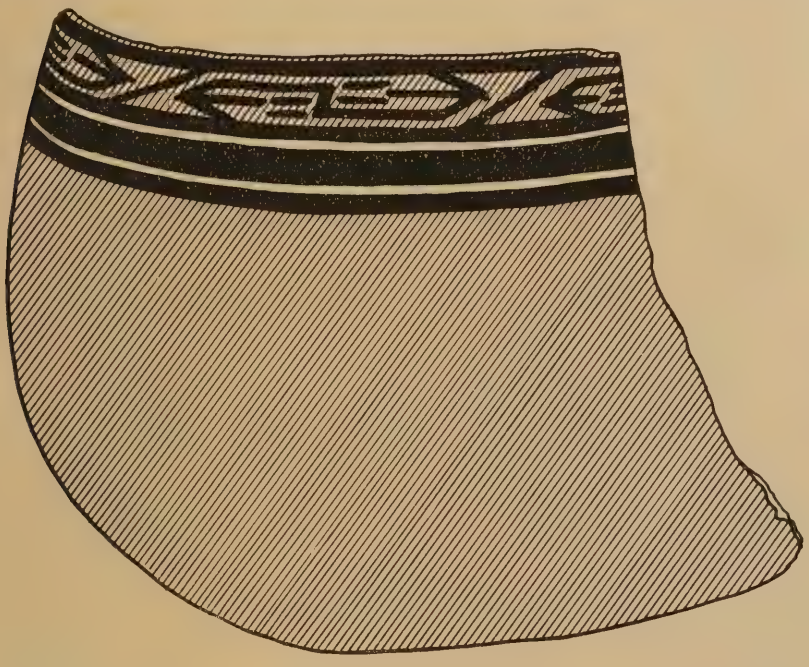

Fig. 17. Incurved bowl fragment, Interlocking style. R–W–B. E–6803e.

rest on stratigraphic evidence but on its being found unassociated with other ware, on its simplicity of style, and on its use of incising which is a rare Peruvian technique. Its chief claim to antiquity is its lack of clear relation to known Peruvian styles, not any determined relation. This lack constitutes good presumption, but no proof of antiquity. As a matter of fact the co-occurrence in place and time of

[36] The Uhle scheme seems to be: Earliest, Proto-Nazca. Next, derived from this, Proto-Lima, of which Chancay E1 Interlocking is a form or variant. Also influenced by Proto-Nazca, or related to it and therefore more or less contemporary with it, is the primitive incised ware of the Ancon and Supe fishermen. The Chancay E2 White-on-red style is a development out of the incised Ancon-Supe style under some degree of influence of the E1 Interlocking. In Los Principios de las Antiguas Civilizaciones Peruanas, Bol. Soc. Ecuat. Estud. Hist. Am., IV, no. 12, p. 11, Uhle makes the ancient fishing culture of Ancon contemporary with the Proto-Nazca of Chincha and Pisco (est. c. 100 B.C.–50 A.C.), but continues early and later Proto-Nazca to c. 650 A.D.

distinct styles is so common in Peru[37] that the living side by side of strata or elements of population largely or wholly using ware of different styles must always be reckoned with as a possibility. A group of people subsisting more on fish than on corn would certainly follow different habits from their contemporary agricultural neighbors and might easily make a somewhat different ware. That they used nets is expectable, and that they had more baskets than cloth might be a result of either poverty or specialized habits of life. The occurrence of llama bones among the "primitive" remains at Supe[38] suggests more intercourse with the highlands than an extremely ancient and backward ethnic unit of the immediate coast might be expected to have had.

Fig. 18. Bowl fragment, Interlocking style. R–W–B. E–6803h.

In short, the high antiquity of the primitive fishing or shellmound culture of the central coast remains to be established by more direct evidence than is yet available. Its connection with the Archaic of Mexico is uncertain. And in any event the inclusion of Chancay White-on-red in this culture is unsubstantiated.

I should be somewhat hesitantly inclined to connect the White-on-red with the simpler non-"shellmound" redware of San Nicolas at Supe, which is often painted in circles, dots, scrolls, lines, and crosses in white or in white edged with black;[39] and with the redware which Strong has described as Middle Ancon I and II;[40] both occurring in definite association with Epigonal and "Tiahuanaco" ware.

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[37] For instance, at Ica, Chincha, Supe, Moche, this volume, pp. 117, 49, 241, 207; and Uhle himself, Pachacamac, pls. 13, 18.

[38] This volume, 263.

[39] *Ibid.*, 249, and pls. 72*a*, 73*i*, *l*, 74*f*, 78*g*, *k*.

[40] *Ibid.*, 145, 148, 157, pls. 45, 47.

[41] That is, Tiahuanaco as a generic Peruvian style as conceived by Uhle, rather than the specific style of the immediate Tiahuanaco region.

As regards the non-White-on-red ware from site E, the relation affirmed by Dr. Uhle with Proto-Nazca is indubitable, especially for the E1a group. It remains to delimit this relation.

Definitely Proto-Nazca are the interlocking fish designs. Probably so are the triangular "abbreviated faces." The cylindrical jars are somewhat similar to Proto-Nazca shapes. As limitations on these resemblances there is first the fact that while the interlocking fish design occurs in Proto-Nazca, it is by no means a specially common decorative motive there.[42] Second, while the trophy head often occurs in Proto-Nazca in conventionalized reduction, a triangle is not its usual form there, and I do not recall its employment in alternatingly

Fig. 19. Large sherd, fish pattern, Interlocking style. R–W–B. E–6741.

opposite directions to form a whole pattern. Most of the Proto-Nazca style, in fact, is not represented at Chancay at all. The free disposition, the curvilinear and often florid treatment, the color variety, the specific pigments of Nazca, are lacking. The Chancay Interlocking low bowls are shaped not like those of Nazca, but more like the incurved ones of White-on-red (E2) and Black-on-white Chancay. All in all, but a small portion of the Proto-Nazca style recurs in Interlocking; and that additional elements of Proto-Nazca are related to certain features of Proto-Lima ware,[43] makes the relation of Interlocking to Proto-Nazca more convincing, indeed, but not greater in amount.

The (*b*) and (*c*) groups of the E1 material also show relation to Proto-Nazca without being more than partly dependent on it. The serrated fish has prototypes in that style. Plate 88*a* particularly, as Dr. Uhle affirms, is close to Proto-

[42] University of California collection from Nazca, 10 pieces out of 560; Museum of the University of San Marcos in Lima (as exhibited in 1925), 6 of about 550.

[43] Frühkulturen, figs. 17, 18.

Fig. 20. Pattern on sherd, Interlocking style. R–W–B. E–6728.

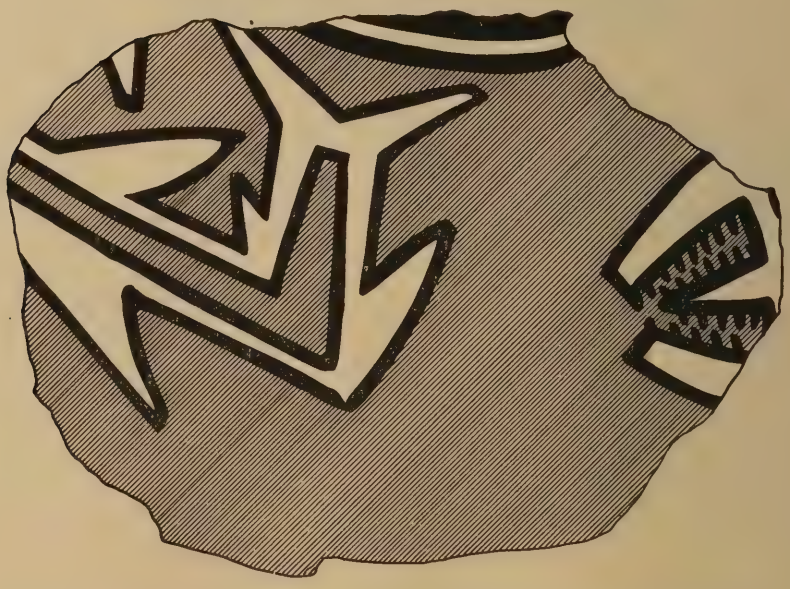


Fig. 21. Large sherd, serrated fish, Interlocking style. R–W–B. E–6733b.

Nazca in conception and treatment; 90*d* less so, just as its shape departs more from Proto-Nazca forms.[44] It is significant that the Chancay double-spout jars resemble the pure Proto-Nazca ones in having their spouts parallel and cylindrical, whereas in Peru outside the range of the Proto-Nazca style the spouts spread and taper. This criterion may have led Dr. Uhle to class the double-spout in plate 86*f* as E2 rather than E1: not only is it crudely smeared with white ornament on red ground, but its spouts diverge.[45] The bird and animal jars of plate 90*a–c* are not in true Proto-Nazca style but do resemble vessels found in the Nazca district, patently related to the Proto-Nazca manner, and apparently derived from it. There are several such in Dr. Uhle's University of California collection from Nazca.

Fig. 22. Jar neck, Interlocking fish pattern, abbreviated. R–W–B. E–6803.

This makes a total of two or three vessel shapes and two or three designs or patterns in the E1 style that can be brought into positive relation with Proto-Nazca. This is enough to establish positively a relation between them; but the relation falls much short of being overpowering.

The following inferences seem the only ones that can safely be drawn. The ceramic material from Chancay site E falls into two stylistically distinct series, plus a certain number of vessels that affiliate more vaguely. The distinct E styles were associated under conditions of record which render it possible, but leave it unproved, that their interments were made at different periods. All the E material is virtually free from admixture with Epigonal, Three-color Geometric, and Black-on-white, both as regards whole specimens and traceable stylistic influence. It must therefore be regarded as falling in a separate time and this time can hardly have been other than antecedent. The Interlocking style E1 contains certain Proto-Nazca elements, worked over under a rigid stylicization. Much of this stylicizing, however, is in conformity with the general tendency

[44] It is well to remember that the Three-color Textile style (Middle and Late Ica, Chincha) makes abundant use of fish motives, and that these often show serrations.

[45] Incidentally, the separation of this piece from the other double-spouts illustrates the entire situation as to material from site E. There is nothing in the objective record to prove this specimen (pl. 86*f*) different in circumstances of deposition or in age from those shown in pls. 88*a*, 89*f*, and fig. 26; but stylistically it surely belongs to a separate group. Whether these two styles represent two successive periods, overlapped in time, or coexisted, is a problem on which Dr. Uhle's insight and experienced judgment are of the greatest weight, but on which no man's opinion can wholly take the place of a demonstration by direct archaeological evidence.

toward three-colored geometric patterning which is observable on the coast from Trujillo to Arica. Something of the specific Chancay Interlocking style has been traced as far as Lima and Pachacamac, but apparently as a minor constituent of the Proto-Lima wares there. The White-on-red style E2 cannot yet be related to the "primitive" styles of Ancon and Supe. Its simplicity makes the recognition of its

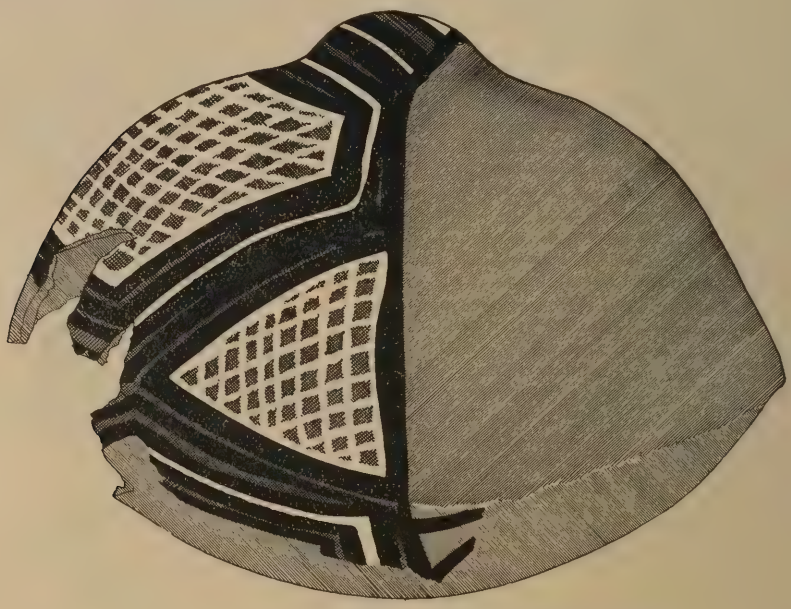


Fig. 23. Mammiform jar from site E. R–W–B on reddish ground. E–7030.

24 25 26

Fig. 24. Jars and fragment attributed to Interlocking style. 24, E–6759; 25, E–6791; 26, E–6760.

affiliations difficult; but there is nothing serious to prevent its acceptance as a local variant of the redware, simply painted in white, black, or white and black, found at Ancon (Middle I and II) and Supe (San Nicolas) in association with Tiahuanaco and Epigonal ware. As to the time relation of the Interlocking and White-on-red styles, it is probable but undemonstrated that, as Dr. Uhle contends, the Interlocking (E1) is earlier than the White-on-red (E2).

CONCLUSIONS

The Uhle excavations at Chancay revealed pottery in five styles, which, in probable order of age, are:

Black-on-white (latest)
Three-color Geometric
Epigonal (3 and 4 color)
White-on-red
Interlocking

The Black-on-white occurs pure in three cemeteries. It is mixed with Three-color Geometric and Epigonal in one cemetery, the association occurring in many graves. As this mixed cemetery, C, lies close to one of the pure cemeteries, B, it is unlikely that they represent contemporaneous settlements of people of different culture. It is likely that the mixed cemetery dates from a period of transition between Epigonal, Three-color, and Black-on-white. The available data from Ancon indicate Black-on-white as latest of the three. Stylistically, the mixed cemetery at Chancay confirms, some of its Black-on-white specimens showing Three-color and Epigonal leanings and vice versa.

As between Three-color and Epigonal, the Chancay excavations allow no conclusion as to priority, but Three-color is a constituent of Late Ancon I, and Epigonal of Middle Ancon II.

White-on-red (E2) is a simple, fairly distinctive, and hitherto undescribed style. It has some degree of similarity to Middle Ancon I; to the style of San Nicolas at Supe; and possibly to the three styles at Chancay just discussed. It bears no notable resemblance to the incised ware of the supposedly primitive fishermen or shellmound dwellers of Ancon and Supe. It is definitely Central Peruvian in character. It has not been found in association with the three previously mentioned styles of Chancay.

The Interlocking style (E1) has been found in Chancay only in association with the White-on-red, under circumstances which render it probable that the Interlocking is earlier but fail to establish absolute proof. These circumstances are the occurrence of Interlocking mainly in fragments, and the occurrence of entire Interlocking vessels chiefly or wholly in graves whose main content was entire White-on-red vessels.

The Interlocking style has considerable affinity with Proto-Lima. It has also specific similarities with Proto-Nazca. But these Proto-Nazca similarities are few. The most frequently occurring one is the Interlocking fish pattern, which is present but uncommon in Proto-Nazca. The Interlocking style therefore represents a special channeling of certain selected streams of Proto-Nazca influence.

Typical Interlocking and typical White-on-red have little in common. While there are vessels which furnish some measure of connection, they also blur the temporal separateness of Interlocking and White-on-red.

APPENDIX

REPORT ON EXPLORATIONS AT CHANCAY

By Max Uhle

La Calera de Jegoan [Site C]

La Calera de Lauren [site B], where White-and-black pottery was obtained, is the southeastern slope of a small mountain or range rising about 200 meters above sea level. The northern or interior side, facing the Andes, forms another smooth slope of stony soil, named the Calera de Jegoan [site C]. The two Caleras are connected by a pass about 80 m. high. Near it are old Spanish copper and silver mines, entered from the Calera de Jegoan.

While the Calera de Lauren [site B] is partly occupied by adobe ruins and deep graves in the sandy soil, the Calera de Jegoan [site C] shows different remains. The ground is filled with foundation walls of stone, and a gravefield about 1 km. long and 0.5 km. wide extends round them. This cemetery has been excavated by huaqueros, but enough remained for successful scientific exploration.

While the burials of the Calera de Lauren [site B] seem nearly to touch Chimu and Inca time, and represent the style commonly known as that of Chancay, so that "type of Chancay" and "White-and-black ware" are found here to have the same meaning, the civilization represented by the graves of La Calera de Jegoan [site C] is quite different. It is so different from everything that has been known from the valley of Chancay, that the exploration made at this cemetery took on almost the character of a revelation. The fact is that the earlier settlement at the foot of these hills was at La Calera de Jegoan [site C]. The burials show a continuous development from the Epigonal (period 2 of Pachacamac), through Three-colored pottery (period 3 of Pachacamac), to the older and middle phases of the White-and-black pottery of Chancay. It was unexpected and interesting to find here the same types of pottery as in the cemetery around the temple of Pachacamac. It was further interesting to follow the origins and development of the typical White-and-black pottery of Chancay and to see how the contents of the burials proved of themselves the succession and development of one style from another. And lastly it was interesting to see how many of the Ancon finds, which

there appear isolated, get their explanation from the stylistic development revealed by this Chancay cemetery. It is evident that through many periods the culture of Ancon was dependent on that of Chancay, as is natural from its proximity. Also the nationality was the same, since the same tribe is said to have extended to the river Chillon; and it is in this area that the white[-and-black] pottery is the most common.

Excavations were made in the southwestern, eastern, and northwestern part of the [site C] cemetery. The graves were 1.2–1.8 m. deep, and sometimes very close together, each burial occupying 1.4 sq. m. Fabrics, other perishable materials, and mostly bones also, were decayed.

Huaral Viejo, Hacienda Guando [Site D]

The graves here belong to the time of the black-and-white pottery of Chancay, and are therefore later than the remains of the Calera of Jegoan [site C], and prove the ruins of Huaral Viejo to have been late.

Some courts, surrounded by walls, represent family burials, and contain each several well-like tombs. Most of the graves of the cemetery had been opened before. I excavated one burial in a court in which no grave had been previously opened. It was about 5 m. deep, the sides 1.9–2.1 m. long. The mummy bale at the bottom, 1.4 m. wide and about 1.8 m. high, consisted mostly of grass, and contained only a bundle of the bones of an incomplete skeleton of a youth; also, very few fabrics could be collected, while in the upper part of the well there were several fragments of injured fabrics, besides skulls.

Cerro de Trinidad [Site E]

My report and catalogue up to here refer to excavations made at Lauren [B], at Jegoan [C], at Huaral Viejo [D], and in the plain at the northwestern foot of the Cerro de Trinidad [A], a spot vulgarly called La Mina from the mouth of a mine in the foot of the mountain. All these excavations, although interesting as representative of a long period of the history of the valley and of the origins and development of its culture from another source, namely the civilization of Tiahuanaco, nevertheless showed no new types of civilization. In this regard the investigations begun on June 20 [1904], on the southern slope of the Cerro de Trinidad, were different. This rock, about 150 m. high, separates the valley of Chancay proper and the port, from a long flat strip of land which from its salty meadows is known as Las Salinas. These latter extend to the small valley of Pasamayo, about

two miles away, through which the river of Chancay empties into the sea. The Valley of Chancay for about twelve miles up from the sea has no river of its own, being irrigated only from ditches, like a delta, and is separated from the valley of Pasamayo by the small mountain in question.

I had for some time observed curious lines on the western slope of this Cerro de Trinidad, and on the neighboring hills to the southwest, which had the appearance of being divided into fields. Much refuse consisting of stones, clay, and fragments of pottery mixed with a few shells, from one to several meters thick, lies there over a considerable area. On coming nearer, one gets the impression that the apparent divisions into fields really are old walls once separating houses and yards, but now decayed to the level of the soil. Where the ground breaks off bluff-like on one side, one distinguishes traces of walls, probably of terraces, filled within (and also outside, but in different manner) with the before mentioned refuse of stone, clay, pottery, etc. Occasionally, also, I observed traces of walls constructed of balls of clay, which according to my experience always point to a remote age. In the plain which lies between the Cerro de Trinidad with its neighboring hills on one side and the port on the other, there are large cemeteries.[46] These have been exploited nearly to the last grave by huaqueros. But fragments of pottery, and textiles lying about as waste of the booty, indicate infallibly that these cemeteries originated only in the latter period of Peruvian antiquity, especially that of the well known White-and-black ware of Chancay. In time I convinced myself also that the seeming lines of field divisions were constructions of this same White-and-black period. On the other hand, the refuse material which had been piled up to level the surface, and most of the pottery fragments in it, are of older date. So are certain wall remnants, especially those of adobe balls, below the refuse fill. But it would have been useless to undertake excavations with the hope of bringing into clearer light these signs of a higher antiquity.

Up to about twenty years ago, the town of Chancay was connected with Ancon by railroad. This railroad crossed the low ridge separating the region of Las Salinas from the plain and port of Chancay, and cuts had been made in its construction. In one of my excursions on horseback undertaken for the purpose of reconnoitering, I passed through these railroad cuts and observed fragments of pottery painted in a distinctive style, unearthed when the cut was opened. The

[46] These cemeteries would seem to include site A, or to have been near it.—Ed.

southern slope of the Cerro de Trinidad on both sides of the railroad grade is pitted nearly to the top of the hill, the pits being filled with stones. Here and there small potsherds were found in the pits, but their decoration was entirely destroyed by time. I was attracted by the distinctiveness of style of the fragments in the cuts, though at first sight I attributed a post-Tiahuanaco origin to them. A very small number of similar sherds had been recovered at Pachacamac in 1896 at considerable depths between the adobes of the platform of the ancient temple of Pachacamac, and were reproduced in my work on Pachacamac,[47] since they were different from all other finds in the town. I had then also assumed a post-Tiahuanaco origin for them, suggesting that they were remnants of vessels broken by the masons during their work on the temple. Now I see that this pottery dated further back, and that its fragments were laid between the temple adobes for some other reason. In any case, it was important to follow the clue given by the painted fragments in the cuts, and careful excavations were undertaken. I am justified in saying that thousands and millions of such fragments are buried in the soil [of site E]. The fill material on the western slope of the Cerro de Trinidad, serving as base for the later Chancay construction, must also contain an innumerable quantity [of the same kind of sherds]. But rarely has it been so difficult as here to find complete vessels. The discovery of a number of vessels sufficient to show their age and history, was extremely slow work. It was a labor full of experiments here and there, many of the experiments failing. My tenacity would not be shaken, but in the end I owed the best of my results to a gradually acquired understanding of the complicated condition which in the course of time had led to the nearly complete annihilation of the original remains.

I began by excavating some of the stone-filled pits on both sides of the abandoned railroad, but soon found that they contained nothing besides some pottery fragments and occasionally a skeleton. Certain spots within the range of the pits were level and sandy. Excavations undertaken in one or another of these spots showed undisturbed burials, though the pottery in them was different from that of the fragments in the pits and cuts. Most of these graves were extremely superficial, from 0.4 to 1 m. deep. The body had its legs drawn up, and was generally laid on one side. Rarely was the position sitting upright. The body was mostly reduced to the smallest possible extent

[47] Figs. 26, 27, 28.

in length, often nearly crushed, in order to be huddled under large fragments of big vessels, which in all burials arched over the body. Large broken stones, like those in the pits, generally protected these large sherds from above and the sides. This was a new type of burial in Peru. It had some similarity with burials made in pots [at Ica] in so far as pottery was used; but these sherds served as protection from above, not, as did the pots, as protection against the moisture of the soil from below. In some respects this new kind of burial had a barbarous character: first, in its extreme superficiality; second, in the simplicity of the potsherd construction in place of more elaborate contrivances; third, in the forced position of many of the skeletons under the potsherds. Some of the graves contained one or two vessels at the sides of the skeleton under the covering potsherd. In many graves there were several large covering sherds, one above the other, frequenty broken by the weight of the soil above.

The next observation was that while the pottery vessels at the sides of the bodies were generally simple, with ornamentation mostly of mere white lines, dots, or rings on a reddish background, the broken pottery used in the construction of the graves bore a different character. These had once been large vessels, often with strong hollow handles, sometimes of curious shapes. Several of the great sherds from them were painted in the same style as that shown by the thousands of fragments with which the ground was filled. These large vessels had been intentionally broken for use in the graves, and on many were still to be seen the marks of blows.

By these signs I was led to the conclusion that the burials here belonged to a people of later date than those who made and painted the large vessels; and that the later people had re-used this finer and older pottery, which they probably found in previous burials, for their own burials. Pursuing my excavations, I also occasionally found unbroken vessels of the older type at the sides of skeletons, together with vessels of the simpler later type; an observation which served to corroborate my assumption that the later people had largely made use of objects manufactured by the earlier people.

I proceeded to excavate more of the sandy spots among the pits in different parts of the slope of the Cerro, but never came across an intact burial of the earlier civilization. I am inclined to assume that all graves of the earlier civilization were destroyed by the later people who rifled their contents.

The large stone-filled pits represent graves which have been opened. But I am inclined to think that these graves belonged to the later or second people, and were opened still later in prehistoric time; for this reason: The whole area of pits on the Cerro slope was intersected by level paths. I inferred that the people who opened most of the ancient cemetery might have spared the paths for convenience; and it proved that while no intact graves are now to be found between the paths, the narrow lines of the paths themselves were still full of such burials. These graves belonged to the later people, that of the simpler pottery; and to them also must have belonged the burials outside the paths which are now represented by pits. These burials under the paths were of the same character as the shallow ones in the sandy spots, and yielded some of the best objects in the collection.

Fragments and complete vessels of the earlier period were observed only in the middle portion of the area of pits. They seemed to be lacking in the northern and southern parts of the pit area, though graves containing only vessels of the later people were still found there. I conclude from this that the destroyed cemetery of the earlier people did not extend so far as that of the second population.

As to the historic relations of the two types of civilization discovered here:

The older people used some shapes of vessels which belonged also to the later people. Such are: large pots with handles; bowls with incurved rim; and bottles or jars with asymmetrical sides, one being flattened, the other humped in the center like a shield [mammiform]. But the general character of ornamentation in the two periods was very different. The earlier period used elaborate designs, mostly in three colors, white, red, and black; while the later used only simple white lines and dots and small rings on red, not higher in style than might be made by a barbarous nation. Still there exist some links between the two styles of ornamentation. The elaborate ornaments of the older period are simplified near the end of the period; animal designs are reduced to simple triangular ornaments; the indications of faces within the triangles gradually disappear; and the last step is reduction in the number of colors used.[48] One can clearly see the results of the progressive conventionalization of the patterns. On the other hand the stylistic difference in the ornamentation of the earlier and later periods is so wide that the two styles cannot have belonged to the same nation. Inasmuch as the more barbarous or entirely primi-

[48] This seems a subjective arrangement of the E material in a sequence from the most developed E1 designs through the simpler ones to E2 designs.—Ed.

tive people would, in this case, have been the one whose culture was indigenous to the valley, the higher civilization of the older people must therefore have been imported from an area of higher development. Presumably there was also an indigenous people in the valley before the importation of this higher foreign civilization—a still earlier simple people; but as yet no traces of them have been found, probably because their population was scant and their remains few and inconspicuous.

Now the question arises, what general age is to be attributed to the two civilizations encountered on this southern side of the Cerro de Trinidad, the early higher and the subsequent simpler one.

The sequence of development of the periods of civilization of Chancay valley subsequent to the time when the style of Tiahuanaco was extended over Peru is complete, and leaves no place in which the two newly discovered styles could be accommodated. It is therefore an obvious inference that these two styles were anterior to the spread of the style of Tiahuanaco.

This simple conclusion coincides with others arrived at by stylistic comparisons. One of my first observations was that the ornament of certain vessels [fig. 13] showed a striking similarity to that of engraved pottery fragments in the oldest pre-Tiahuanaco shellmound of Ancon. The difference in technique—painting against engraving—is in this case of less importance.

The most common design on the pottery of the older people has the typical outline of complementary animal heads on worm-like bodies with serrated edges [the interlocking fish style, in which the "background" forms half the pattern—figs. 10, 11, 19]. This is undoubtedly a textile pattern, and one might easily compare it with similar patterns occurring on textiles of a much later period, namely the second after the style of Tiahuanaco at Pachacamac [Red-white-black]. I have represented a number of such textiles in the work on Pachacamac.[49] There is very little difference between the patterns of the two localities, other than that in the textile patterns of the third period of Pachacamac the triangular animal heads are often replaced by heads of birds or by fishes. On the other hand, in 1901, I found a mummy in an apparently very old burial of the oldest period of Ica [Proto-Nazca] at Ocucaje, a singularity of which was a gauze-like cloth whose perforations formed the same pattern. I concluded then that patterns of this kind might have had a much earlier beginning than in the

[49] Pachacamac, pl. 8, fig. 13; and, also interlocking though perhaps not fish, pl. 8, figs. 15, 16.—Ed.

relatively late period [of Pachacamac, etc.] in which they most often occur. So we remain comparatively free, even on this score, in assigning a time to the origin of this pattern.

The pattern on the rim of the oldest pottery of Chancay often is a double fret with rectangles at one end and a diagonal line or triangle at the other [figs. 10–14, 16–17, 19–20]. Patterns like this also occur on the fragments found between the before mentioned adobes of the Pachacamac temple.[50] They have some relation to maeander ornaments common in the period of Tiahuanaco. But the identical ornament is never used in the Tiahuanaco style, nor are there transitional stages. Nor can such a regular use of maeanders on the rim of vessels be observed in the Tiahuanaco style. The rim ornaments of the old style of Chancay, therefore, do not indicate the age of this style.

Certain vessels better explain the age and the origin of the style. There is one valuable vessel [pl. 90*d*] whose painting represents an animal with thorn-like feet along both sides of the body. Its head is the same as in the common textile pattern [just discussed, the interlocking fish], the thorn-like projections on the body corresponding to the serrated edges of this pattern; but the animal as a whole is of course the same that is so often represented on the oldest pottery of the region of Ica [Proto-Nazca], and typical of it. There it is a myriapod, and it may be that the same animal was intended by the old people of Chancay.

Various shapes at Chancay are also identical with shapes of the Proto-Nazca style, such as: cylindrical vessels; wide-mouthed pot-like vessels; and jars with two spouts. There is one vessel of the last type [pl. 88*a*], as fine in technique and as smoothly polished as any of the Proto-Nazca ones, and painted with six fish-like animals, the intimate relation of which to the mythological designs of the Proto-Nazca period of Ica is self-evident. From the figure of this animal there have been derived many of the designs of fishes characteristic of the old style of Chancay.

Finally, when we remember that round lumps of adobe, characteristic of the Proto-Nazca constructions, are also found with the old Chancay burials, our deductions as to the age and origin of this civilization of Chancay seem quite complete.

At the time when the Proto-Nazca civilization was flourishing in Ica and the south, it also influenced the region of Chancay in central Peru. From it was derived that particular old style of Chancay which

[50] *Ibid.*, figs. 26, 27, 28.

found its most characteristic expression in the textile [interlocking] designs discussed above. Hand in hand with it went the curious [serrated] fish-like designs. How different in character and historical position this [Proto-Nazca influenced] style was from those of all succeeding periods of Chancay, may be further seen in certain dotted designs, especially on some vessels which bear ornaments of from one to about ten large hexagonal faces.[51] This ornament is so strange among everything known from Peru, that if these vessels had not been found in actual excavations [but had drifted into a collection without information], it would be difficult to say from what part of the hemisphere they had come.

This early high civilization based on foreign influence from the south lasted a long enough time in the valley to leave an extensive cemetery, innumerable fragments of painted pottery, and walls of round lumps of adobe. But in the end it dwindled away and left behind a people who scarcely preserved a memory of the people of higher civilization that had preceeded them. The inhabitants of the valley returned from the stage of imported civilization to an indigenous barbarism, which was rather low, the introduction of foreign higher culture having occurred only once. It was not until the end of this second period in Chancay that the civilization and style of the monuments of Tiahuanaco made their entrance into the valley. The discoveries made on the southern slope of the Cerro de Trinidad therefore disclose two periods which preceded the introduction of the style of Tiahuanaco—the oldest hitherto known in central Peru.

My explorations in the valley of Ica and in that of Trujillo in 1899–1901 had the result that in both valleys there were found civilizations [Proto-Nazca and Proto-Chimu] that far antedated the style of Tiahuanaco which since 1892 was recognized as oldest. On the basis of my excavations, I was subsequently able to prove that these two old styles of Ica and Trujillo, however different in appearance, were related to each other. At that time I could not account for the wide geographical separation of the two styles. My excavations in the valley of Chancay, which is situated almost exactly half way between the two other areas, suggest that this geographical gap was bridged by civilizations of the same general character. Of these, the old Chancay culture is the only one as yet known, aside from traces of an

[51] The manuscript here contains a sketch which obviously represents the design on plate 88*f*, but the only other faces are those on 88*c* (fig. 10) and 84*b*, unless the triangular figures in 89*a*, *g* be construed as faces. "Dotted designs" occur in 88*d* and figs. 12, 14, 19, but not in combination with faces. The passage is evidently based on memory.—Ed.

early Ancon civilization whose cemetery it has not yet been possible to find. But it is a natural conclusion that civilizations of the same age and similar character must likewise have existed in the other valleys between Ica and Trujillo. One may have all confidence that the task of discovering these can be fulfilled satisfactorily. We are accordingly on the road to the determination of a new cultural stage all over Peru for a remote epoch in which the construction of the monuments of Tiahuanaco was still unthought of. When this determination has been completed, the problem will follow: Wherefrom descended the civilization of this pre-Tiahuanaco stage? I trust that this question as to the ancestry of Peruvian civilization will be successfully answered at some time to come.

The remote age of the two pre-Tiahuanaco civilizations found on the southern slope of Cerro de Trinidad accounts for the simplicity of their remains. Mostly, there were found only objects of pottery; no objects of metal at all, not even in traces; a number of objects of stone, especially spindle-whorls; only one object of wood; and textiles only in traces. Skulls and other bones were partly preserved. But there was one remnant which deserves to be specially mentioned. During the attempts to find burials in one of the sandy spots within the area of stone pits, there was discovered a painted wall 23 m. long and 1.6 meters high at its best preserved part. It was buried in a small elevation of apparently natural origin; but excavations proved that the ground had been filled to above the top of the wall. The filling was the same mixture of stones, fragments of old pottery, ashes, etc., as that covering a wide area of ground on the [north-]western [i.e., opposite, site A] slope of the Cerro, and must have been heaped up after the end of the period to which the wall belonged. Owing to the stony nature of the fill, excavation was difficult, but the painting proved to be so valuable that the whole wall was laid bare. It was the western wall of a small terrace-like building, which had been erected over an artificial base, 2.6 meters high, composed of material similar to that of the later filling. In the construction of the wall, round lumps of adobe had been used with preference, besides stone, but no bricks of adobe. The painting was done in four colors, white, yellow, red, black; the black, as on pottery, being used for the outlines of the drawings. The latter, sometimes repeated one over the other, reproduced the textile [interlocking fish] design discussed above, and were copied in colors as far as their preservation allowed.[52] This wall

[52] Frühkulturen, p. 358, fig. 6.

therefore originated in the oldest period of the valley; and furthermore, this particular textile design was highly significant. For only a special significance, which undoubtedly was religious, would have induced a people to reproduce a pottery design on the wall of a prominent building.

Undoubtedly there were other ancient buildings in this region. This is indicated by the existence of similar elevations of sandy surface, by traces of old walls in the railroad cuts, and in cuts at the western foot of the Cerro. A temple-like construction with traces of terraces, on the southern side of the railroad grade in front of the painted wall, is of much later date, since in its construction small square adobe bricks were used.

In the plain of the valley, especially around Chancay itself, many small mounds of boulders and earth may be observed. Many of them are oblong and narrow, following the direction in which water runs naturally in the valley. For a long time I was in doubt about these mounds, for a natural origin seemed quite possible. Later, I found fragments of pottery deep in them, which proved them artificial. The original purpose of piling up these mounds may have been to clear the fields of stones. But they must also have been used at an early time as dwelling sites, for, in some of them there are walls of the round adobe lumps which point to the oldest civilization of the valley; and in the deeper layers of one there were found vessels of the second or semi-barbarous pre-Tiahuanaco civilization, together with skeletons. The higher layers of this mound, to judge by fragments of pottery found in them, dated from the late period of White-and-black vessels of Chancay.

1904

SPECIMEN NUMBERS OF OBJECTS ILLUSTRATED

Number prefixes denoting site and grave here replace the prefix 4– which specimens bear in the Museum catalogue: A1–6363 instead of 4–6363.

Plate 80. Black-on-white style jars from sites A, B, D: *a*, A1–6363; *b*, B1–6435; *c*, D–6705; *d*, A1–6409; *e*, B1–6438; *f*, A3–6421.

Plate 81. Black-on-white style jars from sites A, B, C, D: *a*, A1–6369; *b*, B2–6486; *c*, A1–6367; *d*, A5–6429; *e*, C12–6554; *f*, B2–6466; *g*, C36–6683.

Plate 82. Black-on-white style vessels from sites A, B, C, D: *a*, B2–6482; *b*, B1–6442; *c*, A1–6370; *d*, C33–6676; *e*, C11–6551; *f*, C6–6524; *g*, C37–6694.

Plate 83. Epigonal (and Three-color Geometric) style goblets and low bowls from site C: *a*, C22–6605; *b*, C17–6577; *c*, C22–6618; *d*, C28–6633; *e*, C22–6615; *f*, C18–6582; *g*, C1–6510; *h*, C–6656; *i*, C27–6631.

Plate 84. Epigonal and Three-color Geometric style vessels from site C: *a*, C18–6583; E–7011 (found superficially); *c*, C1–6509; *d*, C17–6579; *e*, C–6641; *f*, C10–6545; *g*, C35–6682; *h*, C24–6621.

Plate 85. Three-color Geometric (and Epigonal) style jars from site C: *a*, C11–6552; *b*, C32–6669; *c*, C26–6626; *d*, C17–6576; *e*, C18–6581; *f*, C13–6556; *g*, C1–6504; *h*, C16–6573; *i*, C23–6613; *j*, C11–6553; *k*, C7–6529; *l*, C38–6696.

Plate 86. White-on-red style bowls and jars from site E: *a*, E–6898; *b*, E–6951; *c*, E–6902; *d*, E–6930; *e*, E–6826; *f*, E–6854; *g*, E–6843.

Plate 87. White-on-red style bowls and jars from site E: *a*, E–6956; *b*, E–6873; *c*, E–6809; *d*, E–6988; *e*, E–6967; *f*, E–6807; *g*, E–6867; *h*, E–6908; *i*, E–6937; *j*, E–6978; *k*, E–6805.

Plate 88. Interlocking style vessels from site E: *a*, E–6727; *b*, E–6730; *c*, E–6734; *d*, E–6735; *e*, E–6731; *f*, E–6749.

Plate 89. Interlocking style bowls and jars from site E: *a*, E–6771; *b*, E–6799; *c*, E–6764; *d*, E–6800; *e*, E–6756; *f*, E–6755; *g*, E–6773; *h*, E–6758; *i*, E–6747.

Plate 90. Interlocking style modeled jars from site E: *a*, E–6767; *b*, E–6769; *c*, E–6768; *d*, E–6729; *e*, E–6763; *f*, E–6761; *g*, E–6756; *h*, E–6762.

BLACK-ON-WHITE STYLE: SITES A, B, D

A

B

C

D

E

F

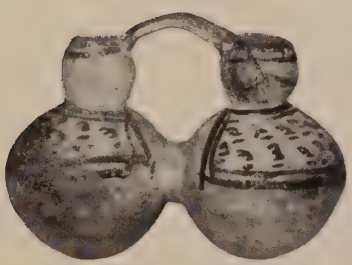
G

BLACK-ON-WHITE STYLE: SITES A, B, C, D

A

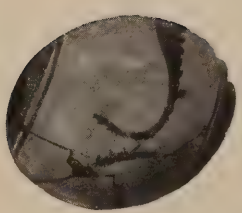
B

C



D

E



F

G

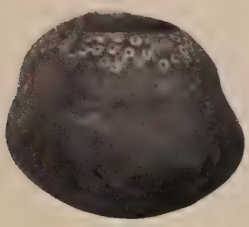
BLACK-ON-WHITE STYLE: SITES A, B, C, D

EPIGONAL AND THREE-COLOR GEOMETRIC STYLES: SITE C

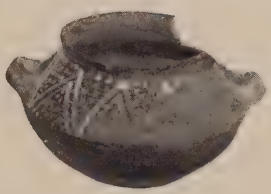
EPIGONAL AND THREE-COLOR GEOMETRIC STYLES: SITE C

EPIGONAL AND THREE-COLOR GEOMETRIC STYLES: SITE C

WHITE-ON-RED STYLE: SITE E



A



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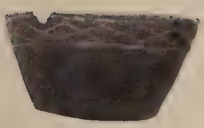

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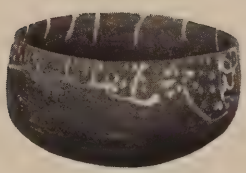

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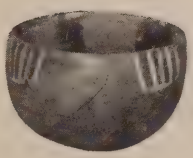


E

F

G

H

I

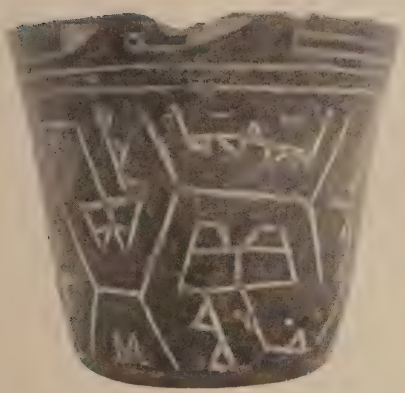
J

K

WHITE-ON-RED STYLE: SITE E

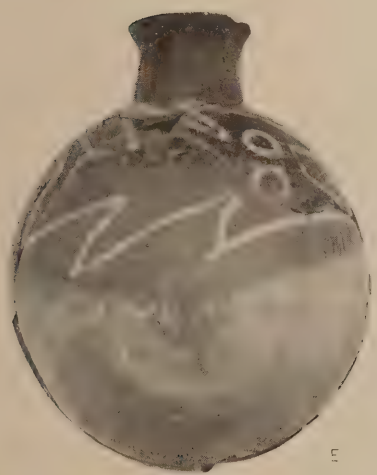
A

B



C

D

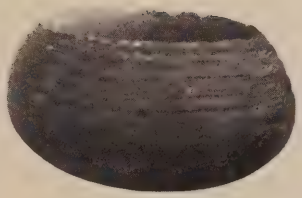


E

F

INTERLOCKING STYLE: SITE E

A



B

C

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I

INTERLOCKING STYLE: SITE E

A

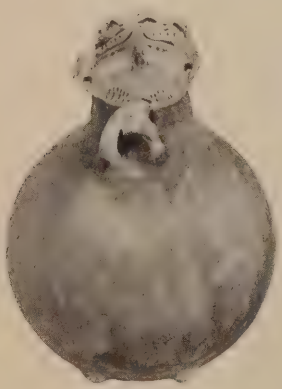
B

C

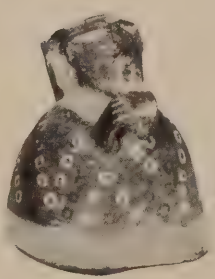
D

E

F



G



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